

RCI-19 - Water Pumping, Treatment, and Use Efficiency

Benefit/Cost of Reducing CO₂e:

Arizona: 6 MMt between 2007-2020; 0.5% of 2020 emissions

Assessment: Medium Priority. Bin B. 14 out of 22 votes.

This option offers GHG emissions reductions and has important water conservation co-benefits. Additional work is required to determine how such programs might be structured in Utah.

At the residential level, water pumping and treatment efficiency is typically confined to improvements homeowners can make.

Programs for treatment efficiency are tailored to specific industry types. Examples of previously implemented strategies can be found for electronics, semi-conductor, cleanroom, fume hood, pulp & paper, stone, glass and clay products, and food products industries.²⁵

The Agricultural Pumping Efficiency Program (APEP) is a multi-level program addressing the resource management problems in California. Eligibility extends to all owners or users of a non-residential, PG&E electric or natural gas account that is primarily used for pumping water for the following: Production agriculture; landscape or turf irrigation; municipal purposes, including potable and tertiary-treated (reclaimed) water but excluding pumps used for industrial processes, raw sewage, or secondary-treated sewage. APEP goals include:

- Getting highly efficient hardware in the field, including pumping plants, irrigation systems, and water distribution systems.
- Ensuring that this hardware is managed correctly.

APEP has operated with funding from a variety of sources including the California Energy Commission, the California Public Utilities Commission, and the Federal Environmental Protection Agency. It works with agriculturalists and municipal and private water companies.²⁶

In Utah, approximately 70% of developed water is used in agriculture.²⁷ However, the Farm Bureau points out that, for the farmer, the saving potential from water pumping efficiency is relatively small, given current commodity prices.

²⁵ http://www.energy.ca.gov/process/industry/industry_intro.html

²⁶ <http://www.pumpefficiency.org>

²⁷ Utah Water Supply/Facts brochure published by Utah Division of Water Resources. Available at: www.water.utah.gov/brochures/default.asp